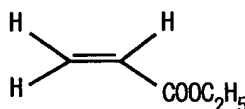
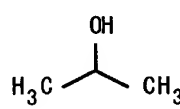
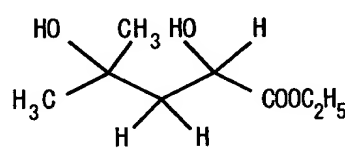
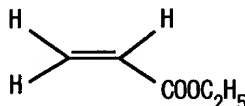
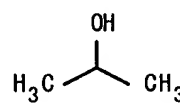
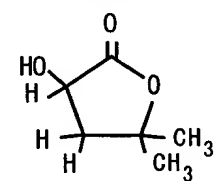
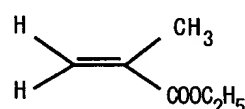
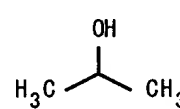
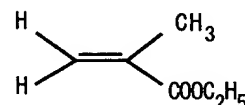
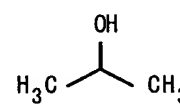
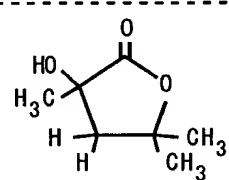
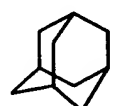

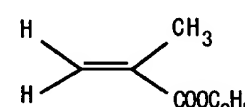
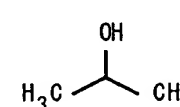
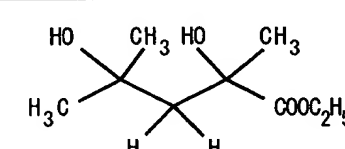
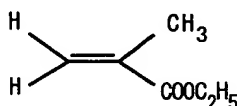
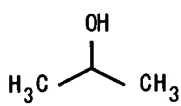
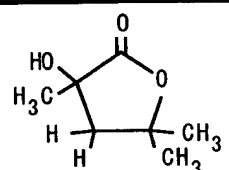
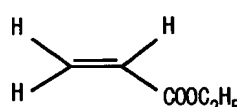
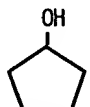
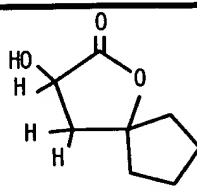
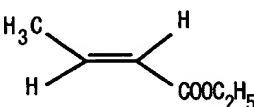
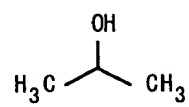
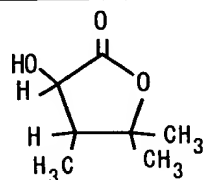
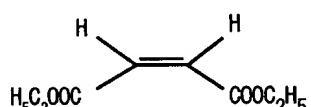
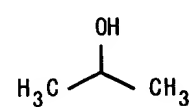
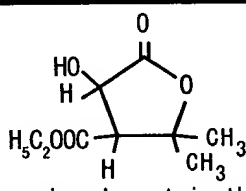
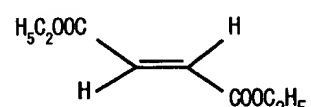
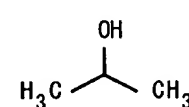
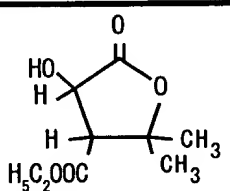
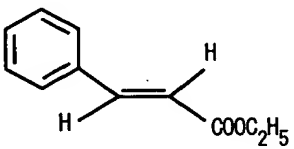
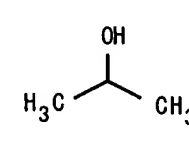
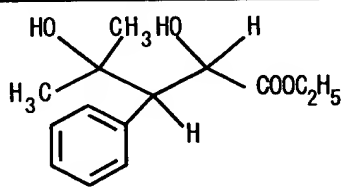
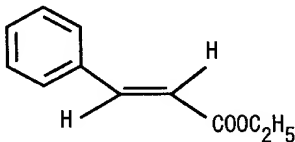
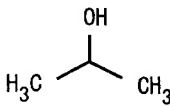
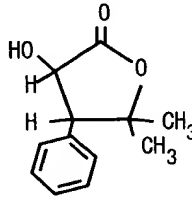
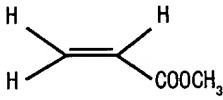

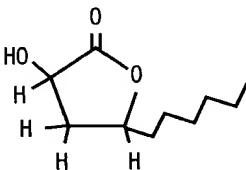
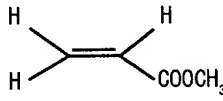
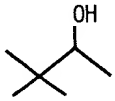
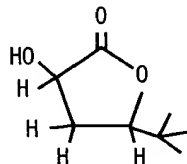
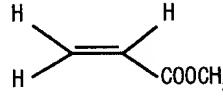
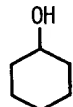
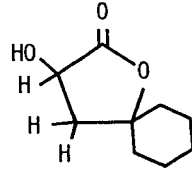
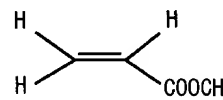

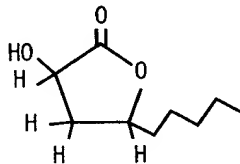
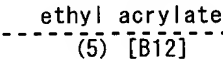
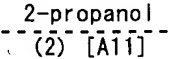
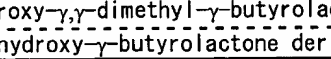
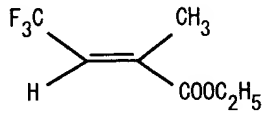
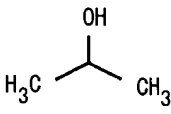
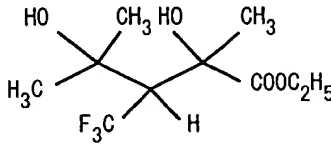
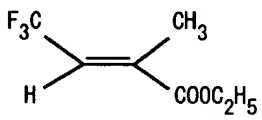
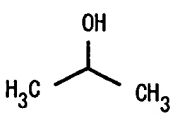
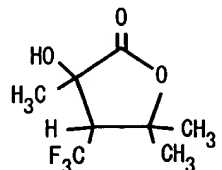
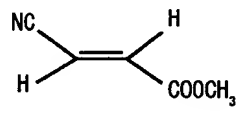
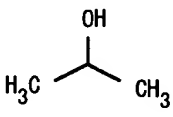
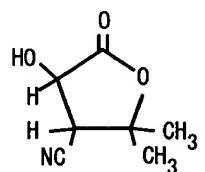
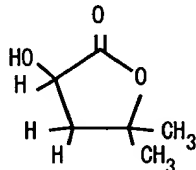
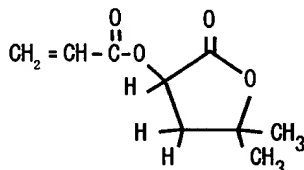
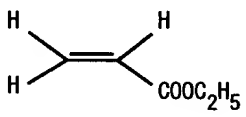
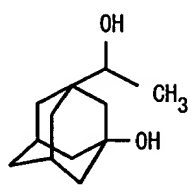
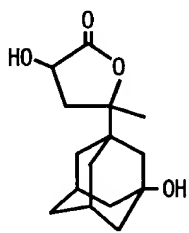
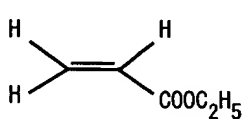
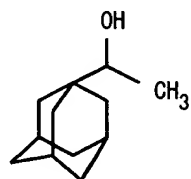
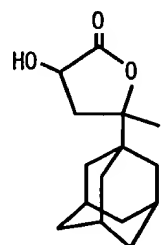
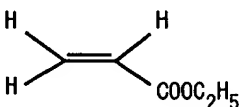
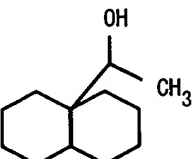
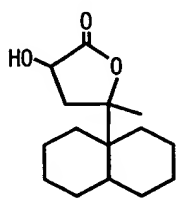
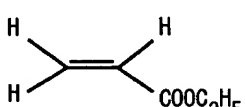
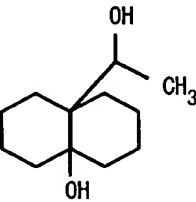
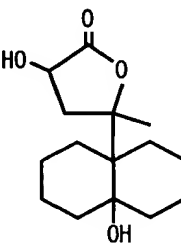
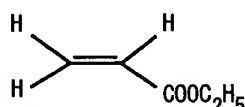
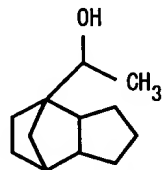
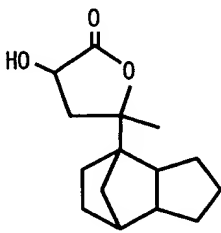
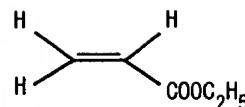
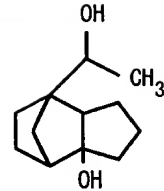
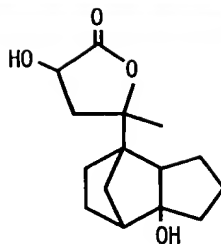


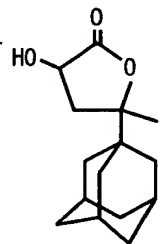
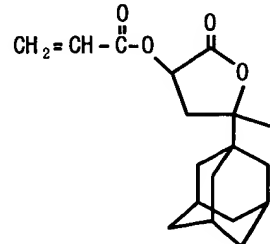
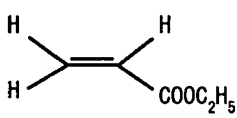
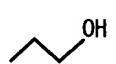
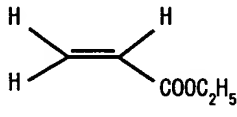
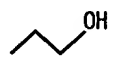
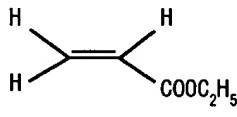
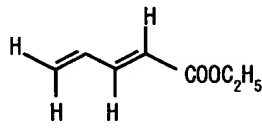
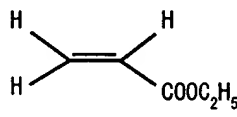
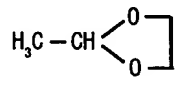
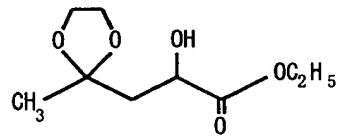
Claim No.		Substrate	Product	
ex. 1, 2	2	<div></div> <div>ethyl acrylate</div> <div>(3) [B11]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>	<div></div> <div>ethyl 2,4-dihydroxy-4-methylpentanoate</div> <div>(4) 1,3-dihydroxy compound</div>
	3	<div></div> <div>ethyl acrylate</div> <div>(5) [B12]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>	<div></div> <div>α-hydroxy-γ,γ-dimethyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>
	ex. 3	2	<div></div> <div>ethyl methacrylate</div> <div>(3) [B11]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>
3		<div></div> <div>ethyl methacrylate</div> <div>(5) [B12]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>	<div></div> <div>α-Hydroxy-α,γ,γ-trimethyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>
ex. 4		20	<div></div> <div>adamantane</div> <div>(14b) [B22]</div>	<div></div> <div>adamantane</div> <div>(14a) [A32]</div>
	ex. 5, 6	2	<div>ethyl acrylate</div> <div>(3) [B11]</div>	<div>2-propanol</div> <div>(2) [A11]</div>
3		<div>ethyl acrylate</div> <div>(5) [B12]</div>	<div>2-propanol</div> <div>(2) [A11]</div>	<div>α-hydroxy-γ,γ-dimethyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>
ex. 7	2	<div></div> <div>ethyl methacrylate</div> <div>(3) [B11]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>	<div></div> <div>ethyl 2,4-dihydroxy-2,4-dimethylpentanoate</div> <div>(4) 1,3-dihydroxy compound</div>

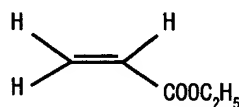
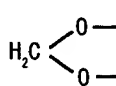
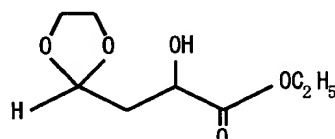
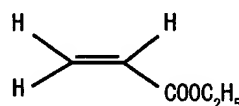

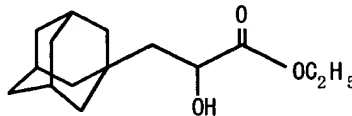
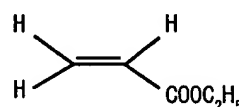
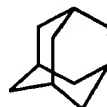
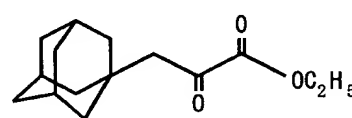
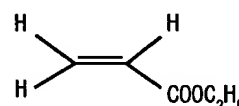

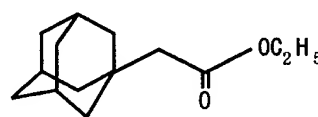
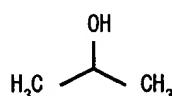
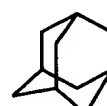
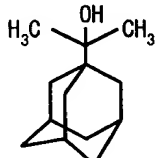
Claim No.		
ex. 7	<div>  <p>ethyl methacrylate</p> </div> <div>  <p>2-propanol</p> </div>	<div>  <p>α-Hydroxy-α,γ,γ-trimethyl-γ-butyrolactone</p> </div> <div> <p>(6) α-hydroxy-γ-butyrolactone derivative</p> </div>
3	(5) [B12]	(2) [A11]
ex. 8	<div>  <p>ethyl acrylate</p> </div> <div>  <p>cyclopentanol</p> </div>	<div>  <p>3-hydroxy-2-oxo-1-oxaspiro[4.4]nonane</p> </div> <div> <p>(6) α-hydroxy-γ-butyrolactone derivative</p> </div>
3	(5) [B12]	(2) [A11]
ex. 9	4	<p>Dissolution of</p> <p>(6a) α-hydroxy-γ,γ-dimethyl-γ-butyrolactone</p> <p>(7) β-Hydroxy-γ,γ-dimethyl-γ-butyrolactone</p>
ex. 10	<div>  <p>ethyl crotonate</p> </div> <div>  <p>2-propanol</p> </div>	<div>  <p>α-Hydroxy-β,γ,γ-trimethyl-γ-butyrolactone</p> </div> <div> <p>(6) α-hydroxy-γ-butyrolactone derivative</p> </div>
3	(5) [B12]	(2) [A11]
ex. 11	<div>  <p>diethyl maleate</p> </div> <div>  <p>2-propanol</p> </div>	<div>  <p>α-Hydroxy-β-ethoxycarbonyl-γ,γ-trimethyl-γ-butyrolactone</p> </div> <div> <p>(6) α-hydroxy-γ-butyrolactone derivative</p> </div>
3	(5) [B12]	(2) [A11]
ex. 12	<div>  <p>diethyl fumarate</p> </div> <div>  <p>2-propanol</p> </div>	<div>  <p>α-Hydroxy-β-ethoxycarbonyl-γ,γ-trimethyl-γ-butyrolactone</p> </div> <div> <p>(6) α-hydroxy-γ-butyrolactone derivative</p> </div>
3	(5) [B12]	(2) [A11]
ex. 13	<div>  <p>diethyl cinnamate</p> </div> <div>  <p>2-propanol</p> </div>	<div>  <p>ethyl 2,4-dihydroxy-4-methyl-3-phenylpentanoate</p> </div> <div> <p>(4) 1,3-dihydroxy compound</p> </div>
2	(3) [B11]	(2) [A11]

Claim No.			
ex. 13			
3	diethyl cinnamate (5) [B12]	2-propanol (2) [A11]	α -Hydroxy- β -phenyl- γ,γ -dimethyl- γ -butyrolactone (6) α -hydroxy- γ -butyrolactone derivative
ex. 14			
3	methyl acrylate (5) [B12]	octanol (2) [A11]	γ -hexyl- α -hydroxy- γ -methyl- γ -butyrolactone (6) α -hydroxy- γ -butyrolactone derivative
ex. 15			
3	methyl acrylate (5) [B12]	3,3-dimethyl-2-butanol (2) [A11]	γ -t-butyl- α -hydroxy- γ -methyl- γ -butyrolactone (6) α -hydroxy- γ -butyrolactone derivative
ex. 16			
3	methyl acrylate (5) [B12]	cyclohexanol (2) [A11]	3-hydroxy-2-oxo-1-oxaspiro[4.5]decane (6) α -hydroxy- γ -butyrolactone derivative
ex. 17			
3	methyl acrylate (5) [B12]	hexanol (2) [A11]	α -hydroxy- γ -pentyl- γ -butyrolactone (6) α -hydroxy- γ -butyrolactone derivative
ex. 18			
3	ethyl acrylate (5) [B12]	2-propanol (2) [A11]	α -hydroxy- γ,γ -dimethyl- γ -butyrolactone (6) α -hydroxy- γ -butyrolactone derivative
ex. 19			
2	ethyl 4,4,4-trifluoro-2-butenate (5) [B12]	2-propanol (2) [A11]	ethyl 4,4,4-trifluoro-3-hydroxy-2-(1-hydroxy-1-methylethyl)butyrate (4) 1,3-dihydroxy compound

Claim No.			
ex. 19	<div></div> <div>ethyl 4,4,4-trifluoro-2-butenate</div> <div>(5) [B12]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>	<div></div> <div>β-trifluoromethyl-α-hydroxy-γ,γ-dimethyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>
ex. 20	<div></div> <div>methyl 3-cyanoacrylate</div> <div>(5) [B12]</div>	<div></div> <div>2-propanol</div> <div>(2) [A11]</div>	<div></div> <div>β-cyano-α-hydroxy-γ,γ-dimethyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>
ex. 21	<div></div> <div>α-hydroxy-γ,γ-dimethyl-γ-butyrolactone</div>	<div></div> <div>α-acryloyloxy-γ,γ-dimethyl-γ-butyrolactone</div>	
ex. 26	<div></div> <div>ethyl acrylate</div> <div>(5) [B12]</div>	<div></div> <div>3-hydroxy-α-methyl-1-adamantanemethanol</div> <div>(2) [A11]</div>	<div></div> <div>γ-(3-hydroxyadamant-1-yl)-α-hydroxy-γ-methyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>
ex. 27	<div></div> <div>ethyl acrylate</div> <div>(5) [B12]</div>	<div></div> <div>α-methyl-1-adamantanemethanol</div> <div>(2) [A11]</div>	<div></div> <div>γ-(1-adamanty)-α-hydroxy-γ-methyl-γ-butyrolactone</div> <div>(6) α-hydroxy-γ-butyrolactone derivative</div>

Claim No.				
ex. 28		 ethyl acrylate	 α -methyl-4a-decalinmethanol	 γ -(4a-decalinyl)- α -hydroxy- γ -methyl- γ -butyrolactone
	3	(5) [B12]	(2) [A11]	(6) α -hydroxy- γ -butyrolactone derivative
ex. 29		 ethyl acrylate	 8a-hydroxy- α -methyl-4a-decalinmethanol	 γ -(8a-hydroxydecalin-4a-yl)- α -hydroxy- γ -methyl- γ -butyrolactone
	3	(5) [B12]	(2) [A11]	(6) α -hydroxy- γ -butyrolactone derivative
ex. 30		 ethyl acrylate	 α -methyl-2-tricyclo[5.2.1.0 ^{2,6}]decanemethanol	 α -hydroxy- γ -methyl- γ -(2-tricyclo[5.2.1.0 ^{2,6}]decanyl)- γ -butyrolactone
	3	(5) [B12]	(2) [A11]	(6) α -hydroxy- γ -butyrolactone derivative
ex. 31		 ethyl acrylate	 6-hydroxy- α -methyl-2-tricyclo[5.2.1.0 ^{2,6}]decanemethanol	 α -hydroxy- γ -methyl- γ -(6-hydroxytricyclo[5.2.1.0 ^{2,6}]decan-2-yl)- γ -butyrolactone
	3	(5) [B12]	(2) [A11]	(6) α -hydroxy- γ -butyrolactone derivative

Claim No.			
ex. 32		 <p>γ-(1-adamantyl)-α-hydroxy -γ-methyl-γ-butyrolactone</p>	 <p>α-acryloyloxy-γ-(1-adamantyl) -γ-methyl-γ-butyrolactone</p>
ex. 33	2	 <p>ethyl acrylate</p> <p>(3) [B11]</p>	 <p>n-propyl alcohol</p> <p>(2) [A11]</p>
	3	 <p>ethyl acrylate</p> <p>(5) [B12]</p>	 <p>n-propyl alcohol</p> <p>(2) [A11]</p>
	14	 <p>ethyl acrylate</p> <p>(3a) [B13]</p>	 <p>ethyl sorbate</p> <p>(11) conjugated unsaturated compound</p>
	15	 <p>ethyl acrylate</p> <p>(3) [B11]</p>	 <p>2-methyl-1,3-dioxolane</p> <p>(12) [A13]</p>
ex. 34			 <p>α β-hydroxyacetal compound</p>
			<p>(13) β-hydroxyacetal compound</p>

Claim No.			
ex. 35			
	ethyl acrylate	1,3-dioxolane	α β -hydroxyacetal compound
15	(3) [B11]	(12) [A13]	(13) β -hydroxyacetal compound
ex. 36 37			
	ethyl acrylate	adamantane	ethyl 3-(adamant-1-yl)-2-hydroxypropionate
	(3) [B11]	(14) [A31]	(15) [hydroxy compound]
ex. 36 37			
	ethyl acrylate	adamantane	ethyl 3-(adamant-1-yl)-2-oxopropionate
	(3b) [B14]	(14) [A31]	(17) carbonyl compound
ex. 36 37			
	ethyl acrylate	adamantane	ethyl 1-adamantaneacetate
18	(3c) [B15]	(14) [A31]	(18) compound having an electron attracting group
ex. 38			
	2-propanol	adamantane	α,α -dimethyl-1-damantanemethanol
19	(2) [A11]	(14) [B21]	(19) alcohol